

What we claim and desire to secure by Letters Patent is:

1. A method of monitoring monitored locations by means of a monitoring system comprising a plurality of monitoring modules (1), each of which has a light-sensitive sensor, for monitoring the monitored locations, and a remote monitoring station (3) with an operator, comprising the steps of

recording by each of the monitoring modules (1) an image (100) of the monitored location associated with the monitoring module,

extracting (120) in each of the monitoring modules an area in the recorded image that differs from a reference image,

extracting in each of the monitoring modules an object (140) from the area,

classifying in each of the monitoring modules (1) the object based on characteristics, such as a characteristic of the type: size, shape and/or movement history, associated with the object, if the object is a human alarm object,

transmitting, if the object is classified as a human alarm object, data representing the area in a stylized way to the monitoring station (3), and

recreating said transmitted data in the monitoring station (3) and displaying the same to the operator for verification of the human alarm object.

2. A method according to claim 1, in which the method further comprises the step of creating the outline shape of the area in order to represent the object in a stylized way.

3. A method according to any one of claims 1 or 2, in which the stylized area is a stylized outline shape.

4. A method according to any one of the preceding claims, further comprising the step of comparing particular characteristics associated with the object with corresponding characteristics associated with an object extracted from a previously recorded image, in which case if the characteristics conform to the extent that they can be considered to belong to the same object, data is recorded about the movement history of the object for classification and/or transmission to the monitoring station to be recreated and displayed to the operator.

5. A method according to any one of the preceding claims, further comprising the steps, if the object is classified as a human alarm object, of transmitting supplementary alarm information about the area such as information of the type: intensity regions and/or line content together with data representing the area in a stylized way and of recreating and displaying the transmitted supplementary alarm information.

6. A monitoring system for monitoring monitored locations, comprising a plurality of monitoring modules (1), each of which has a light-sensitive sensor for

(continued)

(continued claim 6)

recording images of the monitored locations, and a remote monitoring station, the monitoring modules being arranged to carry out computer-based analysis of the images, which comprises extracting areas from the images that differ from a reference image, extracting an object from the area, classifying the object based on characteristics, such as a characteristic of the type: size, shape and/or movement history, associated with the object, and if the object is classified as a human alarm object, transmitting data representing the area in a stylized way to the monitoring station (3) which is arranged to recreate and display said transmitted data to the operator for verification of the human alarm object.

7. A monitoring system according to claim 6, further comprising a central panel which is arranged to receive said data representing the area in a stylized way from at least a subset of the monitoring modules, and to forward this data together with supplementary data, such as data of the type: date, time and information about from which monitoring module said data was received, to the monitoring station.

8. A monitoring system according to claim 6 or 7, in which the monitoring modules and the monitoring station are arranged to communicate by wireless means, such as by mobile telephony.

9. A monitoring module (1) for monitoring a monitored location, which comprises a memory, a light-sensitive sensor for recording an image of the monitored location, and a communication device for communication with an external unit and a calculating unit for detecting a moving object from the recorded information, which monitoring module is arranged to carry out computer-based analysis of the image, which comprises extracting an area from the image that differs from a reference image, extracting an object from the area, classifying the object based on characteristics, such as a characteristic of the type: size, shape and/or movement history, associated with the object, and, if the object is classified as a human alarm object, transmitting data representing the area in a stylized way to an external unit.

10. A monitoring module (1) according to claim 9, in which the memory is arranged to store a particular type of movement information for learning purposes.

11. A monitoring module (1) according to claim 9 or 10, in which the monitoring module (1) comprises a supplementary sensor.